



## Technology for extreme environments

From the ocean floor to the edge of space, Steatite technology is enabling critical applications to operate consistently, reliably, and above all safely, around the clock. Whether gathering scientific insight in the cold and crushing depths at the ocean floor, transmitting high bandwidth data across hostile terrain, processing colossal amounts of traffic data, or simply enabling secure ticket sales on board a train, Steatite technology is the driving force that enables difficult things to happen in situations where failure is simply not an option.

### Steatite

Established in 1938, Steatite has always operated within the electronics industry, originally as a supplier of electrical insulating materials. Over the years the company has diversified into four core areas, **industrial embedded computing**, **multi-chemistry battery packs**, **secure communication systems**, and **high-performance antennas**. Steatite technology is designed to operate in environments where more conventional equipment would rapidly fail. Extra-ordinary levels of robustness and reliability are required in locations where moisture, dust, extremes of temperature, shock and vibration are the norm. Operating from three dedicated UK facilities and employing security cleared staff, Steatite is setting new standards in technology provision.

### Computing

Steatite has been designing and building rugged industrial computers since 1985. Our computers can be found in military, broadcast, transportation, AI and robotics applications, to name a few.

We offer a range of fully customisable rack-mount, fanless and touchscreen computers, as well as more complex bespoke systems designed from the ground up. All are optimally configured based on our customers specific requirements.

Such configuration can include military and other non-standard ports, custom BIOS and O/S configuration, branding and Windows integration, custom chassis design component configuration and more.

Our specialities also extend to small form factor computers, edge servers, and machines specifically for use in AI, machine vision and robotics applications.

In addition to computer technology we supply a range of positioning, navigation and timing (PNT) systems for resilient timing and inertial positioning applications. These high precision units are designed to augment GPS, Galileo and GLONASS to provide time and position in GNSS denied environments.

Many of our products are pre-certified for use in sectors as diverse as military, rail, and marine. These extremely rugged systems are tested to relevant standards including ATEX, Mil-STD, TEMPEST, EN50155, EN60945 and IP6x.

Our computer facility is located in Redditch, Worcestershire. This site also forms the company's headquarters and houses the majority of our support and operational functions.



## Batteries

With a legacy stretching back more than 30 years, we are one of the UK's largest and most respected producers of industrial battery packs and power systems, utilising all major types of cell chemistry.

Operating from a dedicated centre of excellence in Crewkerne, Somerset, we supply highly reliable battery packs to a range of industry sectors including petrochemical, aerospace, safety equipment, medical, oceanographic, robotics and defence. Applications within these sectors operate in some of the harshest environments imaginable, where temperature, shock, pressure and moisture is extreme. Reliable power supply is essential and battery failure can often result in damaging and costly delays to critical activities, injury or worse. Our expertise also extends to complete powertrain solutions for non-road mobile machinery and scalable off the shelf power modules in 24v and 48v iterations.

Our battery packs only use cells from leading global brands. We are authorised to transport lithium battery products worldwide and we hold ISO 9001, 14001 and 18001 accreditations. All of our battery packs are designed, assembled and tested in house by our experienced engineering and production teams, covering all aspects from custom cell configuration and control electronics to enclosures. We also provide a range of more standard COTS battery packs for varying applications.



## Antennas

Located in Leominster, Herefordshire, our antennas facility is a world-renowned producer of high specification RF and microwave antennas and subsystems. We are firmly positioned at the forefront of custom antenna development and manufacturing, but in addition we also offer a substantial range of commercial-off-the-shelf (COTS) products and associated components and accessories.

Since 1973 we have been designing and building cutting-edge antennas that are designed to operate at the very limits of technical capability. Our antennas operate between the frequencies of 30MHz to 60GHz for a range of applications including EW, SIGINT, spectrum management, ESM, RWR, EMC and more. Our prestigious global customer portfolio uses our antennas within a diverse range of sectors including defence, meteorology, test & measurement, and aerospace.

Our dedicated facility is home to a state-of-the-art anechoic RF test chamber. Measuring 7m x 5m and with a height of 6m, this chamber is able to accommodate antennas ranging from hand-held horns to 3m diameter dishes, and enables us to derive full far-field measurements without the complication of requiring a large scale external test range. This site also houses our environmental test laboratory.

## Communications

As the UK's only authorised supplier of Persistent Systems Wave Relay® enabled communications technology, we are in a unique position to be able to provide the most scalable and advanced MANET (mobile ad hoc network) system in the world.

Providing a secure voice, video and high bandwidth data network anywhere (including data-links for autonomous and robotic systems), the Wave Relay® enabled MPU5 smart radio unites all your critical sensor and data sources in real time. The ability to link multiple elements (such as UAV's to UGV's) and stream detailed information securely across the network enables key personnel to make better informed decisions.

Our communications team is widely regarded as the UK and Europe's leading technology expert in the use of advanced MIMO communication systems for tactical applications.



## When only the best will do

With Steatite you can be confident of a professional, no compromise, quality service, with products that utilise only the finest components.

If you have a requirement for any of our technologies contact us on **01527 512400** or email [sales@steatite.co.uk](mailto:sales@steatite.co.uk)

For more information please visit [www.steatite.co.uk](http://www.steatite.co.uk)



Technical specifications are subject to change without notice. E & OE. Issue A.

[Steatite\\_Capability\\_Datasheet\\_07\\_2020\\_REV5.pdf](#)